



**NOAA Teacher at Sea**  
**David Babich**  
**Onboard NOAA Ship FAIRWEATHER**  
**July 5 – 14, 2005**

**Mission: Hydrography**

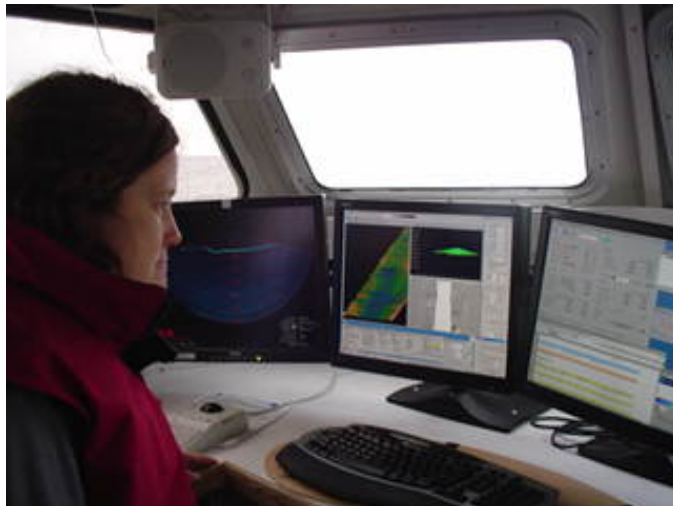
Day 5: Friday, July 7, 2006  
Shumagin Islands, Alaska

**Weather Report**

WX some rain, patchy fog  
Wind NW 15kt  
Sea 2-4 ft  
Temp low 60's

**Science and Technology**

Today was yet another exciting experience out at sea. I was aboard one of two survey launches sent out to survey designated areas around Andronica Island in the Shumagin Islands. These 30-foot boats weigh a substantial 6-7 tons, making it a comfortable ride in and out of the waters around the island. Each boat is equipped with the latest sonar equipment to accurately map the ocean bottom. Surprisingly, most of the area was last surveyed in 1953, and some areas weren't surveyed since the 1920's!



Physical Scientist Martha Herzog monitors data being received from the survey launch's sonar.

Once we arrived at our starting point, we sent down a CTD (conductivity, temperature, depth) device. This device tells the survey technicians the conditions of the water, to accurately interpret the sonar. We ended up taking several CTD readings throughout the day, to make sure the conditions in the water haven't changed. Once the CTD readings were done, the survey launch proceeded to conduct the survey of the designated areas.

Before we left the FAIRWEATHER, we were given small areas around the island to survey. The survey launch goes back and forth over these areas, generally parallel to shore. It is much like mowing your lawn. As the launch goes over the area, it sends out sonar beams down to the ocean floor. By recording how quickly the beams bounce off the ocean floor and return to the launch, the computers can determine how deep it is. It will

clearly identify any places where shallow rocks or other obstacles may be a hazard. This survey will make it safe for other boats to navigate around the area without any surprises.

### Personal Log

Throughout the day, I marveled at the beauty of the lush, but rocky islands surrounding us. These islands are home to millions of birds, the most entertaining being the puffin. Often the survey launch will startle some puffins floating on the water, sending them in all



A raft of Steller Sea Lions sunning themselves off the Shumagin Islands.

directions. Unfortunately with their fat, little bodies, it can be quite a chore for them to get airborne. When the water is choppy, many times they fly right into waves, unable to rise above them! However, once in the air they are quite maneuverable.

The highlight of the day, however, was passing a low, flat, rocky outcrop with a raft of Steller Sea Lions sunning themselves in the late afternoon. The size of some of the male sea

lions was extraordinary. They didn't seem to mind us driving past at first, but something evidently spooked them. About half the sea lions jumped into the ocean with amazing speed. It is hard to imagine animals that large moving so quickly!

After a day on the water, I had new appreciation for the hard work and dedication of the scientists and survey technicians that collect and analyze all the data. It is challenging work and a tribute to the dedication of the NOAA personnel aboard the FAIRWEATHER.

Dave Babich  
Teacher at Sea



Teacher at Sea Dave Babich sits on Survey launch with Steller Sea Lions in background.